



STATEMENT OF

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BEFORE THE

U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON HOMELAND SECURITY

Subcommittee on Cybersecurity, Infrastructure Protection, and Security
Technologies

**“Examining DHS Science and Technology Directorate’s Engagement with Academia
and Industry.”**

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311 Cannon House Office Building

Chairman Ratcliffe, Ranking Member Richmond and members of the Subcommittee, I appreciate the opportunity to testify today on the Department of Homeland Security Science and Technology Directorate and its interactions with the scientific community.

I am a nuclear physicist and currently serve as president of the American Physical Society, representing more than 50,000 physicists in universities, industry and national laboratories. From 2006 until 2012, I was director of Brookhaven National Laboratory (BNL), where I now direct the RIKEN BNL Research Center.

As Brookhaven's director, I oversaw the operation of a multipurpose research institution with world-class facilities and an outstanding staff possessing broad scientific and technological expertise, spanning the life sciences, the physical sciences and engineering. Brookhaven's portfolio extends from discovery-driven research, such as studies of the birth of the universe, to applied research, such as exploration of energy technologies and problems relevant to national and homeland security.

Although I personally have had somewhat limited direct experience with the Department of Homeland Security (DHS), I have known many scientists who have attempted to engage with the DHS Science and Technology Directorate. And their experiences have been mixed, at best. Unlike other federal agencies that have research missions, DHS to the outside world suffers from a lack of transparency and a culture that does not encourage input from our nation's outstanding science and technology community. It doesn't have to be that way.

Like other federal agencies with science and technology mandates, DHS has an advisory committee that is intended to help the department develop and manage its S&T portfolio. But, from all appearances, it is quite dysfunctional. Other agencies, such as the National Science Foundation and the Department of Energy, with which I am very familiar, use their committees to solicit ideas, connect with the science and technology community and develop programming that help the agencies accomplish their missions. The advisory committees are broadly based scientifically, meet frequently in open sessions, provide opportunities for public commentary and make their recommendations widely known.

By contrast, the DHS S&T Advisory Committee comprises only six members drawn from a narrow, parochial community. It meets infrequently, almost always in closed session, and does not make its recommendations easily accessible to interested parties. By allowing the committee to operate in such a fashion, DHS is missing an opportunity to engage the best scientific and technical minds to help the department achieve its goals.

The department's core missions are daunting: preventing terrorism and enhancing security; securing and managing our borders; enforcing and administering our immigration laws; safeguarding and securing cyberspace; and ensuring resilience to disasters. Each one of them requires the best science and technology the nation can muster. Collectively, they require scientific contributions from a multiplicity of disciplines. The present composition and operation of the S&T Advisory Committee is shortchanging the department and needlessly placing Americans at future risk.

What should be done?

First, the S&T Advisory Committee should be expanded to embrace a broader and more balanced membership, reflective of DHS's diverse scientific and technological needs.

Second, an expanded Advisory Committee should play a more proactive role in providing outside advice to the Under Secretary for Science and Technology.

Third, the Under Secretary should make greater use of the Advisory Committee, actively seeking advice, commissioning studies and requesting assistance with long-term planning from people who are not part of his or her inner circle.

Fourth, the Advisory Committee should conduct its work in a more transparent manner, with meetings open to the public, to the extent feasible, and unclassified documents posted on the DHS website on a timely basis so that the public and members of Congress can easily access them.

Finally, the charter of the Advisory Committee should be sharpened to provide a more detailed description of its scope and expected outcomes.

In transforming the Advisory Committee, the DHS Science and Technology Directorate should take a cue from other federal agencies that depend on research and development in fulfilling their missions. The Department of Energy's Office of Science and the Department of Defense provide two good examples.

The DOE Office of Science relies on six committees – comprising 15 to 24 members each – that follow procedures established by the 1972 Federal Advisory Committee Act, with each committee representing a balance of viewpoints and diversity of backgrounds. The Department of Defense relies principally on one advisory committee, the Defense Science Board (DSB) with 32 external members chosen on the basis of their preeminence in the fields of science and technology relevant to the DOD mission.

A DHS S&T Advisory Committee more robustly constituted would help the directorate maintain continuity in its programming, better capture the expertise of the nation's research community and instill greater confidence in its work.

Thank you. I am happy to answer any questions you may have.